

Appl. No. 10/710,023
Amdt. Dated 12/15/2005
Reply to Office Action of 10/18/2005

REMARKS

Claims 1-20 are currently pending. Claims 9-20 are allowed, and claims 1-8 are rejected by the Office. Claims 1 and 7 are herein amended.

Claims Rejections - 35 USC §112 Second Paragraph

The Office rejected Claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. As previously noted, a §112 second paragraph rejection has two separate requirements, indefiniteness and failing to claim what applicant regards as the invention. With respect to indefiniteness, the "essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." (MPEP §2173.02).

The Office Action stated that claim 7 contains the trade name SU-8, which the Office argues may change over time and therefore change the scope of any related claims. The Applicant has done a cursory search and identified over 20 issued patents and over 60 published patent applications with SU-8 in the claims. This was a cursory search using search term "aclm/su-8". There are many texts and websites describing SU-8 in detail, such as the website <http://www.geocities.com/guerini/j/>, in addition to patents such as U.S. Patent No. 4,237,216.

While the Applicant understands the general stance taken by the Office with respect to the use of brand names, this particular instance does not appear to warrant an indefinite rejection. However, in order to advance prosecution, the Applicant has, without prejudice, amended claim 7 to incorporate some of the known chemical compositions for SU-8. This rejection is thereby traversed.

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Claims Rejections - 35 USC §102

The Office rejected claims 1, 6 and 8 under 35 U.S.C. 102(b) as being anticipated by Canavello (US 4,212,935). The Office also rejected claims 1 and 6 under 35 U.S.C. 102(b) as being anticipated by Jennison (US 6,156,487). As previously noted, a rejection based on anticipation requires that *a single reference teach every element of the claim* (MPEP § 2131) [emphasis added]. "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir.1989). Or stated in another way, a "claim is anticipated only if each and every element as set forth in the claim is found, . . . described in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

As noted by the Office as one of the elements that distinguish the present invention, "the prior art fails to teach or suggest a method for fabricating a multi-layered lithographic semiconductor comprising the combination of claimed process steps including depositing an opaque barrier layer to the first resist layer covering the first latent image." (Office Action dated 10/18/2005, pages 5, item 14)

The Applicant has amended claim 1 to impart this allowed aspect of the present invention thereby traversing the rejection and without introducing any new matter requiring any further searching.

In addition, the Application would like to point out that Canavello refers to a single layer photoresist structure wherein the top layer of photoresist is hardened by chemical soaking. There is apparently no manner disclosed that allows the formation of a multiple stack of photoresist layers with different latent images. The Office refers to the background section of Canavello, and in particular to a cited reference in the background section. If the Office maintains this rejection, the Applicant would respectfully request the actual cited reference instead of the background description of the article.

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Jennison describes a lithographic structure formed by a thick layer of photoresist covered by a barrier layer and a thin imaging layer. The thin imaging layer is exposed and developed and the thin barrier layer is etched. The thick bottom layer of photoresist is then etched using the barrier layer as an etch mask. However, there is no description of latent imaging or of pre-exposing the first resist layer as detailed in the present invention. In addition, Jennison does not expose and develop the first layer but rather, uses the thin imaging layer as an etch mask to transfer the pattern.

Claim 1 has been amended and includes elements noted in the allowable subject matter thereby traversing the rejection.

Claim Rejections – 35 USC § 103

The Office rejected claims 2 - 5 as being unpatentable over Canavello. The Office acknowledges that the references do not disclose a second barrier layer and an overlying third resist layer however the Office takes official notice that additional resist layers could be deposited. The Office takes additional official notice to read elements of the present invention such as variable patterns and sizes into the cited reference. Applicant respectfully disagrees with these allegations, but as Claim 1 has been amended to include allowable subject matter, the rejections of dependent claims 2 – 5 are traversed.

As noted in MPEP 2143.03, when *an independent claim is non-obvious under 35 U.S.C.103, then any claim depending therefrom is non-obvious*. Claims 2 - 5 are dependent on claim 1 and should be allowed. Reconsideration of the rejection of all claims is therefore respectfully requested.

Telephone Interview

Present Office policy places great emphasis on telephone interviews initiated by the examiner. For this reason, it is not necessary for an attorney to request a telephone interview. Examiners are not required to note or acknowledge requests for telephone calls or state reasons why such proposed telephone interviews would not be considered effective to advance

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prosecution. However, it is desirable for an attorney to call the examiner if the attorney feels the call will be beneficial to advance prosecution of the application. MPEP §408

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,



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